Amendments to the Claims:

This listing of claims will replace all prior versions, and listing of claims in the application.

Listing of Claims:

Claim 1. (Currently Amended) A chemical treatment method by which a metal film formed on a material to be subjected to film formation is etched into a predetermined pattern, comprising:

(a) a cathode electrolysis reduction step [[of]] comprising performing electrolysis reduction ~~for the~~ on a metal film as a cathode by using one of [[a]] ~~first~~ (i) an acidic reduction treatment solution containing an acid radical and (ii) an alkaline reduction treatment solution containing a halogen ion; and

(b) an etching ~~acid dip~~ step [[of]] ~~dipping~~ comprising etching the metal film ~~into a second acidic~~ in an etching treatment solution after the cathode electrolysis reduction step.

Claim 2. (Currently Amended) A method according to claim 1, wherein the ~~first~~ cathode electrolysis reduction step is carried out with the acidic reduction treatment solution [[is]] which comprises one ~~member~~ compound selected from the group consisting

of hydrochloric acid, sulfuric acid, carboxylic acid, hydrogen fluoride[[,]] and phosphoric acid.

Claim 3. (Currently Amended) A method according to claim 1, wherein the cathode electrolysis reduction step is carried out with the alkaline reduction treatment solution which comprises a halogen ion ~~is one member~~ selected from the group consisting of sodium chloride, potassium chloride[[,]] and potassium iodide.

Claim 4. (Currently Amended) A method according to claim 1, wherein the ~~second acidic~~ etching treatment solution contains a halogen ion.

Claim 5. (Currently amended) A chemical treatment method by which a metal film formed on a material to be subjected to film formation is etched into a predetermined pattern, comprising:

(a) a cathode electrolysis reduction step [[of]] comprising performing electrolysis reduction ~~for the~~ on a metal film as a cathode by using a reduction treatment solution containing a halogen ion; and

(b) an acid dip step [[of]] comprising dipping the metal film into an acidic etching treatment solution after the cathode electrolysis reduction step.

Claim 6. (Currently Amended) A method according to claim 5, wherein the acidic etching treatment solution contains a halogen ion.

Claim 7. (Currently amended) A method according to ~~any one of claims 4 to~~ claim 6, wherein the halogen ion in the acidic etching treatment solution is a chloride ion.

Claim 8. (Currently amended) A method according to any one of claims 1 to 6, wherein the cathode electrolysis reduction step further comprises dipping a portion of the metal film into **[[a]]** an etching treatment solution containing a halogen ion.

Claim 9. (Currently Amended) A method according to claim 8, wherein **[[a]]** ~~metal forming~~ the metal film is formed from one metal selected from the group consisting of chromium, titanium, tungsten, palladium**[[,]]** and molybdenum.

Claim 10. (Currently Amended) A method according to claim 8, wherein **[[a]]** ~~metal forming~~ the metal film is formed from an alloy containing at least one metal selected from the group consisting of chromium, titanium, tungsten, palladium**[[,]]** and molybdenum.

Claim 11. (Currently Amended) A chemical treatment method by which a metal film formed on a material to be subjected to film formation is etched into a predetermined pattern[[,]] comprising:

~~wherein the~~ dipping a metal film ~~is dipped~~ in an acidic treatment solution containing a halogen ion, and performing electrolysis reduction ~~is performed for~~ on the metal film as a cathode.

Claim 12. (Currently Amended) A method according to any one of claims 1 to 5 ~~and~~ or 11, wherein [[a]] ~~metal forming~~ the metal film is formed from one metal selected from the group consisting of chromium, titanium, tungsten, palladium[[,]] and molybdenum.

Claim 13. (Currently Amended) A method according to any one of claims 1 to 5 ~~and~~ or 11, wherein [[a]] ~~metal forming~~ the metal film is formed from an alloy containing at least one element selected from the group consisting of chromium, titanium, tungsten, palladium[[,]] and molybdenum.

Claim 14. (Original) A method according to claim 11, wherein the halogen ion is a chloride ion.

Claims 15 to 23 (Canceled).

Claim 24. (New) A method according to claim 4, wherein the halogen ion in the etching treatment solution is a chloride ion.

Claim 25. (New) A method according to claim 5, wherein the halogen ion in the reduction treatment solution is a chloride ion.

Claim 26. (New) A method according to claim 3, wherein the halogen ion is potassium chloride.

Claim 27. (New) A method according to claim 1, wherein the metal film comprises a nickel chrome alloy.

Claim 28. (New) A method according to claim 5, wherein the metal film comprises a nickel chrome alloy.

Claim 29. (New) A method according to claim 11, wherein the metal film comprises a nickel chrome alloy.